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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,009	07/24/2003	Ashoke K. SenGupta	28216/38681B	9906

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EXAMINER	
CHEUNG, WILLIAM K	
ART UNIT	**PAPER NUMBER**
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/626,009	SENGUPTA ET AL.	
	Examiner	Art Unit	
	WILLIAM K. CHEUNG	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,14-18,34-41 and 43-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,14-18,34-41 and 43-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the amendment filed October 1, 2008, claims 6-13, 19-33, 42 have been cancelled, and new claims 54, 55 have been added. Claims 1-5, 14-18, 34-41, 43-55 are pending.

2. In view of the amendment filed October 1, 2008, the rejection of Claims 1-5, 14-18, 34, 35, 37, 43 are rejected under 35 U.S.C. 112, first paragraph, is withdrawn.

Claim Rejections - 35 USC § 112

3. Claims 35, 36, 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 35 (line 2-3), claim 36 (line 2-3), claim 43 (line 2-3), the recited amount of smectite clay "3.4% by weight" are not supported by the original specification. Applicants' specification (page 19), the table clearly disclose the layered silicate to be in the range "about 5 to about 70%".

The argument filed October 1, 2008 has been considered, and the argument fails to address the issues of claims 35, 36, 43.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-5, 14-18, 34-37, 54 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lukenbach et al. (WO 01/01949) for the reasons adequately set forth from paragraph 7 of the office action of May 1, 2008.

1. (Currently amended) A composition for thickening hydrophobic liquids comprising a smectite clay and an amphipathic copolymer comprising PEG-30 dipolyhydroxystearate, said smectite clay selected from the group consisting of bentonite, montmorillonite, saponite, hectorite, beidellite, stevensite, and mixtures thereof, and wherein the amphipathic copolymer, upon adsorption onto the smectite clay surface to form a surface-modified smectite clay, is able to modify the clay-surface in a manner such that the surface-modified smectite clay is capable of thickening a hydrophobic liquid to a Brookfield viscosity of ~~at least~~ 50,000 cps to 1,280,00 cps at 0.5 rpm of spindle speed, when dispersed in the hydrophobic liquid at a dosage of about 4% by weight of the hydrophobic liquid.

Lukenbach et al. (page 51, claim 28) disclose a silicate material comprising a PEG-30 dipolyhydroxylstearate. Lukenbach et al. (page 13, line 18-20) disclose the composition comprises mica, alumina, silica, calcium silicate (a wollastonite clay), sodium magnesium fluorosilicate (a modified version of talc or bentonite clay), and mixture thereof. Lukenbach et al. (page 14, line 1-2) also disclose the incorporation of propylene glycol, hexylene glycol, butylenes glycol which can function as thickening aid. Lukenbach et al. (page 15, line 10-11) disclose the incorporation of lipophilic (hydrophobic) compounds which include liquid hydrocarbon such as hydrogenated polydecene/ cetyl alcohol, stearyl alcohol mixture. Lilembacj et al. (page 31, example 7) clearly teach a process that involves stirring to achieve a homogenous composition with a mixer. In view of the substantially identical composition and the incorporation of similar components such as calcium silicate (a wollastonite clay) and sodium magnesium fluorosilicate (a modified version of talc or bentonite clay) between the composition of Lukenbach et al. and the composition of claims 1-7, 14-18, 34-37, the examiner has a reasonable basis that the claimed “layered” feature and the

"amphiphathic" feature of claim 1, the "smectic" feature of claim 7, the dielectric constant of claim 4, and the viscosity features of claims 35-36 are inherently possessed in Lukenbach et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Applicant's arguments filed October 1, 2008 have been fully considered but they are not persuasive. Applicants argue that the claimed invention relates to hectorite, not wollastonite clay or a modified talc, but is a fluorine-modified hectorite. However, applicants must recognize that the claimed "hectorite" still generically include a modified hectorite, which is clearly disclosed in Lukenbach et al.

Regarding the declaration filed October 1, 2008, applicants argue that the exhibit A discloses hectorite that is not fluorine-modified (substituted) hectorite. However, after reviewing exhibit A, the exhibit A does not provide any evidence to support such argument. Applicants must recognize that exhibit A only discloses that Laponite B is a synthetic layer fluorosilicate, and it does not indicate that bentonite can not be sodium magnesium fluorosilicate.

Regarding applicants' argument that Lukenbach et al. do not anticipate the claimed invention because Lukenbach et al. teach a composition comprising other ingredients that are not being claimed, applicants fail to recognize that the claimed invention does not exclude the ingredients disclosed in Lukenbach et al. as claimed.

Regarding applicants' argument that the claimed combination leads to an unexpected high viscosity, applicants must recognize that an argument with "unexpected result" should be accompanied with comparative data in order to show the criticality of the claimed invention. Further, the use of "unexpected results" is not sufficient for overcoming an anticipation invention.

Regarding applicants' argument that the claimed invention is not considered obvious in view of the "unexpected results" disclosed in the Declaration filed February 4, 2008 and October 1, 2008. Regarding exhibit B, exhibit B does not support the argument filed.

7. Claims 38-53, 55 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Vatter et al. (US 2002/0028223) as evident by Alzo product literature (http://www.alzointernational.com/emollients.htm) for the reasons adequately set forth from paragraph 8 of the office action of May 1, 2008.

38. (Previously presented) A composition for thickening hydrophobic liquids comprising a layered silicate material, surfaces of said layered silicate material modified by an amphipathic copolymer comprising BIS-PEG-15 Dimethicone/IPDI Copolymer.

Vatter et al. (abstract) disclose an anhydrous skin treatment composition. According to Vatter et al., the anhydrous skin treatment composition comprises the Bis-PEG-15 Dimethicone/IPDI copolymer as claimed (page 9, 0132), also known by the tradename of Polyderm PPI-SI-WS, supplied by Alzo. Vatter et al. (page 7, 0103) disclose the use of pigments/powder fillers that include smectite clays such as organically modified montmorillonite. Vatter et al. disclose that the composition

comprises (hydrophobic liquid) vegetable oil (page 10, 0158), and polyhydric alcohol esters (page 10, 0164). For thickening (or solidifying), Vatter et al. (page 11, 0170) disclose the use of waxy materials. Vatter et al. (page 20, claim 4) disclose that the composition comprises propylene glycol, and hexylene glycol. Vatter et al. (page 7, 0102; page 14, example 1) clearly disclose a method involving high shear mixing (Silverson L4RT Mixer at 9000 rpms) for preparing a composition comprising functional particulate materials such as TiO_2 and talc. Vatter et al. (page 20, claim 1-4) clearly disclose the weight percent that fully encompasses weight percent of the components as claimed. In view of the substantially identical composition disclosed in Vatter et al. and as claimed and that the disclosed smectite clay is mixed with Polyderm PPI-SI-WS, the examiner has a reasonable basis that the claimed "layered silicate material modified with an amphipathic copolymer comprising Bis-PEG-15 Dimethicone/IPDI copolymer"of claim 38, the Brookfield viscosity of claim 43, and the dielectric constant of less than about 10 of claim 44 are inherently possessed in Vatter et al., Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

ALZO International Urethane Emollients and Conditioners

http://www.alzointernational.com/emollients.htm

PRODUCT	INCI NAME
Polyderm PPI-BZ	Benzyl Alcohol-Ethylene Glycol/IPDI Copolymer
Polyderm PPI-CA-15	Di-PEG-15 Cocamine/IPDI Copolymer
Polyderm PPI-CO	Castor Oil/IPDI Copolymer
Polyderm PPI-CO-H	Hydrogenated Castor Oil/IPDI Copolymer
Polyderm PPI-CO-40	PEG-40 Hydrogenated Castor Oil/IPDI Copolymer
Polyderm PPI-CO-200	PEG-200 Hydrogenated Castor Oil/IPDI Copolymer
Polyderm PPI-DGDIS	Diglycerol Diisostearate/IPDI Copolymer
Polyderm PPI-GH	Glycereth-7 Hydroxystearate/IPDI Copolymer
Polyderm PPI-PE	Diethylene Glycol Adipate/IPDI Copolymer
Polyderm PPI-SA	Di-2 PEG Soyamine/IPDI Copolymer
Polyderm PPI-SI	Dimethiconol/IPDI Copolymer
Polyderm PPI-SI-50	Dimethiconol/IPDI Copolymer 50%
Polyderm PPI-SI/SA	Dimethiconol-PEG-2 Soyamine/IPDI Copolymer
Polyderm PPI-SI-WI	Dimethicone Copolyol/IPDI Copolymer water insoluble
Polyderm PPI-SI-WS	Dimethicone Copolyol/IPDI Copolymer water soluble
Monoderm MPI-BZ	Benzyl Alcohol Dimer/IPDI
Monoderm MPI-N-1-100	PEG-100 Methyl Alcohol Dimer/IPDI
Monoderm MPI-12-3	Laureth-3 Alcohol Dimer/IPDI
Monoderm MPI-1-14	Isomyristyl Alcohol Dimer/IPDI
Monoderm MPI-1-16	Isocetyl Alcohol Dimer/IPDI
Monoderm MPI-1-18	Isostearyl Alcohol Dimer/IPDI
Monoderm MPI-N-18-100	PEG-100 Stearyl Ether/Dimer/IPDI
Monoderm MPI-1-20	Octyldodecyl Alcohol Dimer/IPDI
Monoderm MPI-1-24	2-Decyltetradecyl Alcohol Dimer/IPDI
Monoderm MPI-RC	Ricinoleamidopropyl Amine Dimer/IPDI

Applicant's arguments filed October 1, 2008 have been fully considered but they are not persuasive. Applicants argue that the claimed invention relates to hectorite, not wollastonite clay or a modified talc, but is a fluorine-modified hectorite. However, applicants must recognize that the claimed "hectorite" still generically include a modified hectorite, which is clearly disclosed in Lukenbach et al.

Regarding the declaration filed October 1, 2008, applicants argue that the exhibit A discloses hectorite that is not fluorine-modified (substituted) hectorite. However, after reviewing exhibit A, the exhibit A does not provide any evidence to support such argument. Applicants must recognize that exhibit A only discloses that Laponite B is a

synthetic layer fluorosilicate, and it does not indicate that bentonite can not be sodium magnesium fluorosilicate.

Regarding applicants' argument that Lukenbach et al. do not anticipate the claimed invention because Lukenbach et al. teach a composition comprising other ingredients that are not being claimed, applicants fail to recognize that the claimed invention does not exclude the ingredients disclosed in Lukenbach et al. as claimed.

Regarding applicants' argument that the claimed combination leads to an unexpected high viscosity, applicants must recognize that an argument with "unexpected result" should be accompanied with comparative data in order to show the criticality of the claimed invention. Further, the use of "unexpected results" is not sufficient for overcoming an anticipation invention.

Regarding applicants' argument that the claimed invention is not considered obvious in view of the "unexpected results" disclosed in the Declaration filed February 4, 2008 and October 1, 2008. However, the examiner disagrees because the argued "unexpected results" as presented in exhibit D does not contain comparative data that include examples that are done according to the closest prior art of Lukenbach et al. Applicants must recognize that examples 13 and 14 of exhibit D do not contain any thickeners that are clearly taught in Lukenbach et al. (page 14, line 1-2). Applicants must recognize that claim 1 as written does not exclude the use of a thickener in view of the recitation "comprising".

Applicants also argue that Lukenbach et al. teach the use of wollastonite clay that is a modified version of talc or bentonite. Further, applicants argue that the disclosed sodium magnesium fluorosilcate is an altered version of hectorite. However, applicants must recognize that the altered version of hectorite still meet the “hectorite” feature which is recited in applicants' claim 1. Although applicants argue that the claimed "hectorite" feature is not "a modified hectorite containing fluorine", the argued “modified hectorite containing fluorine” is still belong to the claimed “hectorite” genus. Therefore, the examiner has a reasonable basis to believe that exhibit B fails to overcome the rejection set forth.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/William K Cheung/
Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D.
Primary Examiner
December 30, 2008